

Translation

PATENT COOPERATION TREATY

PCT/JP2003/004069



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference HP197	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/JP2003/004069	International filing date (day/month/year) 31 March 2003 (31.03.2003)	Priority date (day/month/year)	
International Patent Classification (IPC) or national classification and IPC D02G 3/38			
Applicant HIROTA, Yusuke			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
 - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 30 August 2004 (30.08.2004)	Date of completion of this report 11 May 2005 (11.05.2005)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/004069

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1-16 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ 4, 6, 7 _____, as originally filed/furnished
- pages* _____ 1-3, 5, 8-10, 13 _____, as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages _____ 1/4-4/4 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☒ the claims, Nos. _____ 11, 12 _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/JP 03/04069

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-10, 13	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-10, 13	NO
Industrial applicability (IA)	Claims	1-10, 13	YES
	Claims		NO

2. Citations and explanations

Document 1: JP 5-179535 A

Document 2: JP 11-1835 A

Claims 1 to 10 and 13

Documents 1 and 2

Document 1 discloses a fiber material comprising a synthetic fiber containing titanium oxide and a natural fiber (claims, paragraph [0011]), and discloses the use of polyester fiber and nylon fiber as the synthetic fiber (paragraph [0011]).

Document 2 discloses a fiber material comprising a natural fiber and a polyester fiber containing titanium oxide (claims, paragraph [0011]).

Documents 1 and 2 do not make any particular disclosures pertaining to the use of silk or animal hair fibers as the natural fiber, but this type of fiber provides the same effect as natural fibers such as cotton, linen, or rayon, and the use thereof is merely a widely implemented feature (if more documentation pertaining to this feature is necessary, see: JP 4-257333 A (claim 3), WO 01/88237 A (claim 4), or JP 2002-275736 A (claim 2)).

Further, the combination of titanium oxide and silk fiber is a merely a known technique, as the applicant himself notes in the presentation of prior art documents in the background art portion of the description.

Thus, a person skilled in the art could easily conceive of simply using the above two types of fiber— which are merely representative materials, widely used as materials that produce the same effect as natural fibers such as cotton, and which are known in combination with titanium oxide—as the natural fiber in the invention disclosed in documents 1 and 2.

Moreover, even considering the possible effect of selecting the above two fibers, the description cannot be said to provide any disclosure pertaining to the advantages of using the above two fibers. Further, a feature wherein a synthetic fiber is made to contain titanium oxide is disclosed in detail in documents 1 and 2, and as the applicant himself notes, it is known that titanium oxide prevents yellowing, and thus, the invention cannot be considered to produce an exceptional effect.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/04069

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁷ D02G3/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ D02G, D02J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPIL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 5-179535 A (Unitika Ltd.), 20 July, 1993 (20.07.93), Claims; Par. Nos. [0010] to [0011] (Family: none)	1-13
X	JP 11-1835 A (Asahi Chemical Industry Co., Ltd.), 06 January, 1999 (06.01.99), Claims; Par. No. [0011] (Family: none)	1-13
A	JP 4-91238 A (Unitika Ltd.), 24 March, 1992 (24.03.92), All references (Family: none)	1-13

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:
 "A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier document but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
 "&" document member of the same patent family

Date of the actual completion of the international search
27 June, 2003 (27.06.03)Date of mailing of the international search report
15 July, 2003 (15.07.03)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.